FROM FIELD AND STUDY

Additions to the terrestrial vertebrate fauna of the Shark Bay Region, Western Australia. — Storr and Harold in three recent papers (Rec. West. Aust. Mus. 6, 1978: 449-67; ibid 8, 1980: 359-75; West. Aust. Nat. 14, 1980: 240) have documented the herpetofauna of the Shark Bay region and of near coastal areas immediately south of Shark Bay to the Murchison river (the Zuytdorp Region).

Following these extensive surveys it is perhaps unexpected that further

additions to the fauna should occur.

In early June 1980, specimens of the frog *Pseudophryne occidentalis* were collected by us adjacent to breeding pools at two sites covered by the Zuytdorp survey: 10.1 km east of Hamelin Pool Station (Western Australian Museum Registration No. R71880) and, 33.2 km north of Billabong Roadhouse on the Northwest Coastal Highway (W.A.M. R71881-2). At both sites males were calling. At the Hamelin Pool site a male was collected from under a stone at the water's edge where there was also a clutch of eggs. Extensive heavy rain fell in this area about 4 days before the animals were collected. These records of *P. occidentalis* extend the range of this species considerably northwest over ranges reported by A.R. Main (*Frogs of Southern Western Australia*, West. Australials's Club, 1965); J. Barker and G.C. Grigg (*A field guide to Australian frogs*, Rlgby, 1977) and H.G. Cogger (Reptiles and amphibians of Australia, second edition, Reed, 1979). The Hamelin Pool locality is 265 km northwest of the closest specimen held in the W.A. Museum collection (Reg No. Tallering R54210-13).

Also in June, 1980, two specimens of the gekko *Phyllodactylus marmoratus* (W.A.M. R69846) were collected under limestone slabs on cliff tops north of False Entrance, 21 km west north west of Carrarang Station. This record extends the range considerably over that reported by Cogger (*loc. cit.*) and is roughly 450 km northwest of the nearest mainland records for this species at Cockleshell Gully (J. Dell and A. Chapman, *Rec. West. Aust. Mus.* Suppl. 4, 1977: 75-86) and Leeman (J. Dell pers. comm.). This gekko is, however, common on the Abrolhos Islands.

A. Baynes (The analysis of a late quaternary mammal fauna from Hastings Cave, Jurien, Western Australia. unpublished Ph. D. thesis, Department of Zoology, University of Western Australia, 1979) reported on the extant and fossil mammal fauna sites in the Shark Bay region. Baynes presented detailed data for False Entrance Well and for the extant fauna recorded four introductions (cats, Felis catus; house mice, Mus musculus; rabbits, Oryctolagus cuniculus and foxes, Vulpes vulpes), two rodents (Pseudomys albocinereus, Rattus tunneyi), two bats (Nyctophilus geoffroyi, Eptesicus pumilus) and the euro (Macropus robustus).

Trapping at this site in June 1980, using a drift fence and pit traps, we captured a single specimen of Sminthopsis murina (W.A.M. M18847). Baynes reported this species as fossil material from sites near False Entrance Well, Baba Head and Dirk Hartog Island. The nearest modern record of this species is from Overlander Roadhouse (W.A.M. M10217) 115 km east of our collection site.

Biogeographically, none of these range extensions is surprising. The record for S. murina establishes the existence of this species in an area where it was previously thought to be locally extinct. S. murina is fairly widespread in southwest Western Australia (Baynes, loc. cit.) and our capture of this species may reflect differences in trapping methods (pit traps with drift fence, c.f. Baynes use of "Sherman" or "Elliott" folding traps, break back traps and spotlight observations) rather than recent changes in the distribution of the species. The records of Phyllodactylus marmoratus are a little more unexpected. However, both P. marmoratus and Sminthopsis murina are widespread in the southwest of W.A. (Baynes loc. cit.; Cogger loc. cit.) and the False Entrance Well site falls within the north-western limits of the southwest botanical province (J.S. Beard, 1976, Murchison, Explanatory notes to Sheet 6, 1:100,000 series, Vegetation Survey of western Australia. University of W.A. Press: Nedlands). The range extension for Pseudophryne occidentalis does

not extend this species into any unexpected area. P. ocidentalis is widespread in the drier areas of Western Australia (Main loc.cit.) and has probably not been collected here previously because it is a small, cryptozoic species only likely to be detected easily when calling.

 D. KING, Agriculture Protection Board, Bouganvillea Avenue, Forrestfield, 6058, and J.D. ROBERTS, Department of Zoology, University of Western Australia, Nedlands, 6009.

Streaked Shearwaters Calonectric leucomelas off mld-west coast of Western Australia.— On 10 May 1981 I was on board the Western Australian Fisheries and Wildlife Patrol Vessel "Abel Tasman" returning to Geraldton from North Island, Houtman Abrolhos. Between 1350 and 1420 hr, while in the Geelvink Channel about 60 km NNW of Geraldton, I observed parties of two, eight and twenty large shearwaters of a species with which I was unfamiliar. The birds were associating with small flocks of Wedge-tailed Shearwaters (Puflinus pacificus) and occasionally alighted on the water near large schools of sardines. Unlike the Wedge-tailed Shearwaters they were timid and the closest that they approached the boat was 100-200 m.

The sea was calm with light north-east winds. By standing high up on the fly bridge with 10 x 40 binoculars I was able to make sketches and notes on several individuals. A composite description is as follows: a little larger than Wedge-tailed Shearwaters; top of head, back, wings and tail dark brown (brownlsh-grey on one); lower back and rump grey, clearly paler than back, wings and tail; under parts including underwing white, the white extending up on to face; undertail dark. The flocks of eight and twenty were flying and alighting on the water in company with Wedge-tailed Shearwaters, facilitating direct comparison. I noted that the wings were longer but relatively narrower (more sickle-like) than in the Wedge-tailed Shearwaters. Their flight was similar to that of the Wedge-tailed Shearwaters. I was unable to determine bill and leg colour.

The Streaked Shearwater is the common shearwater of Japan and Korea. According to Austin and Kuroda (The Birds of Japan, their status and distribution, Bull. Mus. comp. Zool., 109, 1953: 302) and Austin (The birds of Korea, Bull. Mus. comp. Zool., 101, 1972: 32) they breed on many islands off Japan and Korea. In Japan they lay in June and July; the young hatch in August and leave the nest in November. In Korea they begin to arrive at the breeding islands in mid-March and start to lay in mid-June; the young leave the nest burrow in mid-October. Peters (Check-list of birds of the world, 1, 1931: 53) also lists the Bonin and Pescadores Islands as breeding sites and gives its range as coasts of Korea and Japan to the Malay Archipelago and New Guinea, occasionally to Ceylon. It is seen fairly frequently off the north coast of New Guinea, but the only formal Australian record is of three beachwashed specimens collected on North Stradbroke Island, Qld., in March 1975.

- R.E. JOHNSTONE, Western Australian Museum.